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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,201	10/11/2006	Masahiro Imaizumi	441P103	7390
42754	7590	01/07/2009	EXAMINER	
Niels & Lemack 176 E. Main Street Suite #5 Westboro, MA 01581			HON, SOW FUN	
			ART UNIT	PAPER NUMBER
			1794	
			MAIL DATE	DELIVERY MODE
			01/07/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/591,201

**Applicant(s)**

IMAIZUMI ET AL.

**Examiner**

SOPHIE HON

**Art Unit**

1794

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/19/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 11, 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 7/31/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 1-10, 12 in the reply filed on 9/19/08 is acknowledged. The traversal is on the ground(s) that the technical feature that is common to both Group I and Group II is neither anticipated nor obvious and is hence special. This is not found persuasive for the reasons set forth below.

The requirement is still deemed proper and is therefore made FINAL.

***Request for Reconsideration***

***Rejections Repeated***

2. The 35 U.S.C. 102(b) rejection of claims 1-3, 5-7, 10, 12 as being anticipated by Asano, as evidenced by Wikipedia, is repeated for the same reasons previously of record in the Office action dated 05/08/08.
3. The 35 U.S.C. 102(b) rejection of claims 1-7, 10 as being anticipated by Sumita as evidenced by Wikipedia, is repeated for the same reasons previously of record in the Office action dated 05/08/08.
4. The 35 U.S.C. 103(a) rejection of claims 4, 8 over Asano, as evidenced by Wikipedia, and further in view of Tahara, is repeated for the same reasons previously of record in the Office action dated 05/08/08.
5. The 35 U.S.C. 103(a) rejection of claims 8-9, 12 over Sumita, as evidenced by Wikipedia, and further in view of Tahara, is repeated for the same reasons previously of record in the Office action dated 05/08/08.
6. The 35 U.S.C. 103(a) rejection of claim 9 over Asano in view of Tahara, as evidenced by Wikipedia, and further in view of Sumita, is repeated for the same reasons previously of record in the Office action dated 05/08/08.

***Response to Arguments***

7. Applicant's arguments have been fully considered but they are not persuasive.
8. Applicant argues that the present invention lies in the process comprising a specified dispersion treatment which comprises homogeneously dispersing fine

particles (D) having a specified average particle size in a specified resin (C) dissolved in a solvent (B) using a wet dispersion (A), wherein because the solvent (B) is not an ingredient of the sealing material, in order to realize the condition for said specified dispersion treatment, solvent (B) is first added to the wet dispersion unit (A) and removed after the dispersion treatment, whereby during this specified dispersion treatment, the fine particles (D) and the reactive resin (C) receive a very complex action from the media (b) contained in a dispersion vessel (a) and colliding with each other in a high-speed rotating field, which action is characteristic of a dispersion treatment in a wet dispersion treatment, where the structure including the size, shape, surface condition and the like of the fine particles (D) as well as the dispersion state of the fine particles (D) in said reactive resin (C) is believed to be brought to a special state which will not be realized by other types of dispersion treatment.

9. Regarding Asano, Applicant argues that Asano [makes no distinction between] a sand mill, a three-roll mill and a ball mill where the examples only contain a three-roll mill, and thus fails to teach the use of a ball mill or a sand mill for the purpose of obtaining better results thereby.

Applicant is respectfully apprised that the use of a ball mill or a sand mill as a wet dispersion mixer is well known in the mixing art. Asano teaches the objective of producing a sealing material by homogeneously dispersing (mixing uniformly, Detailed Description, [0037]) fine particles (D) having an average particle size of not more than 3  $\mu\text{m}$  (essential component (e) filler, abstract) in a reactive resin (C) having an epoxy group and (meth)acryloyl group (acrylic or methacrylic acid, Detailed Description,

[0014]) combined with dissolution mixing of the epoxy resin of many organic functions (Detailed Description, [0037]), thus highlighting the need for a combination of homogenous dispersion of the composition and dissolution mixing of the epoxy resin which is the objective of Applicant. The three-roll mill is better associated with the compounding of semi-solid elastomeric compositions, while the ball mill or sand mill is better suited for wet dispersions and thus better suited for the desired homogeneity of dispersion combined with dissolution mixing of the epoxy resin which implies some form of wet state.

10. Applicant argues that both Asano and Sumita only teach a three-roll mill as a disperser in the examples.

Applicant is respectfully apprised that the use of a ball mill or a sand mill as a wet dispersion mixer is well known in the mixing art. The three-roll mill is better associated with the compounding of semi-solid elastomeric compositions, while the ball mill or sand mill is better associated with wet dispersions and thus better suited for the desired homogeneity of dispersion of a composition comprising the epoxy resin which is syrupy and difficult to handle uniformly and hence properly homogenize on a three-roll mill.

11. Applicant argues that after the specified dispersion treatment, the structure including the size, shape, surface condition of the fine particles as well as the dispersion state of the fine particles (D) in said resin (C) are believed to be brought to a special state that will not be realized by other types of dispersion treatments.

Applicant is respectfully apprised that the beliefs of counsel can not take the place of factually supported objective evidence in the record. See MPEP 2145 and

716.01. Furthermore, it is noted that the features upon which Applicant relies (i.e., the special state which is the specific combination of final size, shape, surface condition of the fine particles and dispersion state of the fine particles (D) in said resin (C)) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

12. Applicant argues that this special state is very difficult to exactly define since the action from the media (b) is very complex, and is thus defined by the process.

Applicant is respectfully apprised that due to Applicant's clarification that the special state is very difficult to define due to the complex action from the media (b), the specific combinations of sealing composition and process steps need to be defined in as much detail as possible to clearly distinguish these "special states" from those that may be inherent in the prior art. As such, the scope of the present claims is not commensurate with the specific combinations of sealing composition and process steps that are described in the examples of Applicant's specification.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (571)272-1492. The examiner can normally be reached Monday to Friday from 10:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks, can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Sophie Hon/  
Examiner, Art Unit 1794

/KEITH D. HENDRICKS/  
Supervisory Patent Examiner, Art Unit 1794